4.10 CULTURAL RESOURCES

This section addresses the potential cultural resources impacts that could result from the granting of a new lease for Shell Terminal operations, as well as for Project alternatives.

4.10.1 Environmental Setting

Prehistoric, Ethnographic, and Historic Background

The San Francisco Bay area was occupied as early as 8000 B.C., as indicated by radiocarbon dated components from a site near San Jose (Moratto 1984:277). The period from 5000 to 2000 B.C. is represented by radiocarbon dates from this period from several sites around San Francisco Bay. Cultural material recovered from these sites indicate that occupants of the region were foragers who likely moved in a seasonal round between bay or coast and hills. Population densities were low and people probably moved to where resources could be obtained. Shellfish were collected, but were not as important as in later times. Large projectile points and millingstones indicate hunting and vegetal food processing. During this period, the occupants of the area probably spoke a Hokan language (Moratto 1984:277).

After 2000 B.C., large shell middens indicate more intensive use of marine resources from the bay. Material from sites dating from 2000 B.C. to 500 A.D., has been assigned to the Berkeley Pattern which may represent an in-migration of Utian speakers from the Central Valley (Moratto 1984:279). By 1 A.D., many Berkeley Pattern settlements can be characterized as villages. Increased sedentism was made possible by reliance on acorns, a storable carbohydrate source, and shellfish, a protein source available year-round. Burial data indicate that there was little status differentiation and ceremonialism was not well developed. Trade goods were few and consisted of finished specimens, rather than raw materials.

The late prehistoric Augustine Pattern (500 A.D. to Spanish contact) represents a continuation of the same Berkeley Pattern material culture with the addition of the bow and arrow, the harpoon, tubular tobacco pipe, and pre-interment grave burning (Moratto 1984:283). During this period, population increased, there was increased status differentiation, greater trade and exchange using shell bead “money,” and the spread of secret societies, cults, and associated ceremonialism.

Martinez is in territory occupied by the Native American group known to the Spanish and twentieth century ethnographers as the Costanoan (Levy 1978). The contemporary descendants of this group are members of the Ohlone Indian Tribe. The Costanoan group occupied the coast of California from San Francisco to Monterey and inland to include the coastal mountains from the southern side of the Carquinez Straits to the eastern side of the Salinas River south of Chalone Creek. Costanoan actually refers to a language family consisting of eight related languages. Each language was spoken by a different ethnic group within a recognized geographical area. The political units within each ethnic group were tribelets. Tribelet population varied from 50 to 500 with the

average being about 200 people. Each tribelet had one or more permanent villages and several temporary camps within its territory. Collecting and hunting parties lived in temporary camps when obtaining resources within the tribelet territory away from the village.

Martinez is in the area occupied by speakers of the Karkin language. This language was spoken only in a small area on the south side of Carquinez Straits. It is estimated there were about 200 speakers of this language in 1770 A.D. (Levy 1978:485). All of the Karkin speakers made up only one tribelet.

Each tribelet had a chief and the office was inherited patrilineally. In particular, the chief fed visitors, directed ceremonial activities, organized hunting, fishing, and gathering, and directed warfare expeditions. However, except during times of war, the chief did not have coercive powers. The chief and elders council advised the community and attempted to achieve consensus. The most frequent cause of war was infringement of territorial rights. The bow and arrow were used in war. Trade between the coastal Costanoan groups and the inland Yokuts groups involved the exchange of coastal products such as mussels, abalone shells, dried abalone meat, and salt for inland products such as piñon nuts.

Acorns from four species of oak were the most important plant food. Nuts, berries, seeds, and roots were also important. Costanoan groups practiced managed burning of chaparral to encourage sprouting of seed plants and improve browsing for deer and elk.

The most important animals consumed were deer and rabbit. Other animals eaten included elk, antelope, bear, and mountain lion. Whales and sea lions were eaten when found stranded on the beach. Dog, wildcat, skunk, raccoon, and squirrel were also eaten. Waterfowl were captured in nets using decoys. Steelhead, salmon, sturgeon, and lampreys were the most important fish, and mussels and abalone were the most important shellfish.

People lived in thatched dome houses with rectangular doorways and a central hearth. Other structures in a village included sweathouses, dance enclosures, and an assembly house. Technology included tule balsa canoes, bows and arrows, and baskets. Chipped stone tools were made from chert obtained locally and obsidian obtained in trade with other groups.

Seven missions were established by the Spanish in Costanoan territory between 1770 and 1797. Due to introduced European diseases and a declining birth rate, the Costanoan population decreased from about 10,000 to 2,000 by 1832. The Mexican government closed the missions in the early 1830s. Former mission lands were granted to soldiers and other Mexican citizens for use as cattle ranches. Ranching continued during the American period that began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. The Gold Rush of 1849 brought

large numbers of Anglo-Americans to the area, resulting in the rapid expansion of San Francisco, which became the commercial entrepot for the region. Other towns in the bay area, such as Oakland and San Jose, developed rapidly after the arrival of the Southern Pacific transcontinental railroad in 1869 (Beck and Haase 1974). The bay area towns provided commercial, warehousing, financial, and manufacturing services for the agricultural and mining areas further east.

The Martinez area was originally part of two Mexican land grants. The Rancho El Pinole was granted to Ygnacio Martinez in 1824 (Martinez Historical Society n.d.). The eastern boundary of this grant was Alhambra Creek, which runs through the city of Martinez. The area east of Alhambra Creek was granted to William Welch in 1844 as part of Rancho Las Juntas (Diablo Valley College n.d.). The origins of the town of Martinez can be traced to the 1847 establishment of ferry service across Carquinez Strait between what would later become Martinez and Benicia. The ferry was operated by Dr. Robert Semple, a dentist who had served as a lieutenant in the California Bear Flag Revolt. During the Gold Rush in 1849, the ferry was part of the main route from San Francisco to the gold mining areas in the Sierras. Col. William Smith, who had married into the Martinez family, established a townsite at the ferry crossing on the west side of the mouth of Alhambra Creek. The Welch family expanded the townsite onto their land east of Alhambra Creek. The town developed rapidly by providing supplies and other services to the gold miners using the ferry route. Further development ensued when the legislature designated Martinez as the county seat of Contra Costa County in 1851 (Martinez Historical Society n.d.).

Although the initial development of the Martinez area was based on the Gold Rush, sustained development came from agriculture. The principal commodities were wheat and fruit. Wine production began in the 1880s. The beginning of rail service through Martinez in 1877 facilitated shipping of agricultural products (Martinez Historical Society n.d.). John Muir, naturalist and founder of the Sierra Club, married the daughter of Dr. John Strentzel, one of the principal fruit growers in the area, and lived in Martinez from 1890 to 1914. Muir's house in Martinez is preserved as a National Historic site (National Park Service n.d.). Commercial salmon fishing in Carquinez Strait began in the 1870s, and soon thereafter two fish canneries were in operation in Martinez (Martinez Historical Society n.d.).

Martinez became an industrial center in the early twentieth century when chemical and petroleum facilities were built. The Mountain Copper smelter was built at Bull's Head Point in the early years of the twentieth century. Shell Oil opened a refinery just inland from the smelter in 1915, and Associated Oil opened their refinery at Avon (east of Martinez) a few years later. The Martinez location provided a deep water harbor and rail connections for these industrial facilities. The industrial facilities and a later expansion of county operations facilities enabled Martinez to grow from a population of 875 in 1880 to over 30,000 in 1990 (Martinez Historical Society n.d.).

Cultural Resources in the Vicinity of the Shell Terminal

The Shell Terminal dates back to approximately 1915 with the origin of the Refinery. The original Shell Terminal was a single timber structure approximately 625 feet long, located approximately where Berth #1 is today. In or about the late 1950s or early 1960s, the original approachway structure, which consisted of a 3-pile trestle, was expanded by the addition of two rows to piles to the east of the existing trestle. These piles were tied to the existing structure with two parallel bolted caps, which provided an extension to the pipeway. In the late 1960s and early 1970s, a new structure was designed to replace the aging timber facility (Echeclon Engineering 2004). The 1970 expansion included widening of the pipeway and new timber piles and caps to the current width of about 62 feet (MacDonell Engineering 1993).

Shell's application to CSLC (Equilon Enterprises LLC 2000), contains a brief overview of cultural resources conducted by Entrix in 2000. The potential for the Shell Terminal to contain cultural resources was investigated through a record search through the State Historic Preservation Office (SHPO). State and Federal inventories list no historic properties within the Project area. Appendix C of the Equilon Enterprises Application, Addendum 1, contains as Attachment 1, a July 25, 2000 letter from SHPO stating that the Project area contains no historic properties or Native American or historic cultural resources listed within the Historical Information System.

In addition, a records search was obtained from the Northwest Information Center of the California Historical Resources Information System. The records search showed that there are four historic resources and one prehistoric archaeological site recorded within one mile of the Shell Terminal. The prehistoric site (CA-CCO-251) is a shell midden near Suisun Point recorded in the early twentieth century by Nels Nelson, an archaeologist from the University of California. Two of the historic sites consist of the remnants of the Mountain Copper Company Wharf (P-07-002543) and the Mountain Copper Company West Pier (P-07-002545) on Bull's Head Point. The Southern Pacific Railroad Martinez-Benicia Bridge (P-48-000445), built in 1930, crosses Carquinez Strait from Bull's Head Point to Benicia. The final historic resource is a farmstead where most structures are no longer standing (P-07-000438; CA-CCO-697).

The Shell Terminal extends into Carquinez Strait from a low-lying marshy area. Archaeological sites (both prehistoric and historic) are not likely here. Both of the previously recorded archaeological sites are on higher ground to the west and south.

An underwater survey for shipwrecks was performed along Bull's Head Channel in the Strait just beyond the end of the Shell Terminal wharf. No shipwrecks were encountered in this area. According to the CSLC shipwrecks data file (on file at the Northwest Information Center), the two nearest recorded shipwrecks are the *Alden Anderson* and the *Alpine* located near the Avon dock, about one and one-half miles east of the Shell Terminal. Other shipwrecks are located in Carquinez Strait near Port Costa and Benicia.

According to the Historic Property Data File maintained by the Office of Historic Preservation and on file at the Northwest Information Center, there are 51 properties in Martinez and three in the vicinity of Martinez that have buildings more than 50 years old and that have been evaluated using National Register of Historic Places (NRHP) criteria. One of these properties is the Shell Martinez Manufacturing Complex (Shell Oil Refinery) at 1801 Marina Vista Way. It was determined not eligible for the NRHP in 1989. The rest of the properties with buildings more than 50 years old are farther from the Shell Terminal and are mostly located in central and inland areas of Martinez.

The Shell Terminal is older than 50 years old, however, it has been modified over the years and retains no historic integrity.

4.10.2 Regulatory Setting

Federal

A number of Federal statutes, regulations, and rules govern the protection of cultural resources in the Project area, including:

- The Antiquities Act of 1906;
- The National Historic Preservation Act of 1966;
- Executive Order 11593;
- The Archaeological and Historic Preservation Act of 1979;
- The American Indian Religious Freedom Act of 1978; and
- The Shipwreck Preservation Act of 1987.

State

The pertinent State legislation and local plans that govern the protection of cultural resources in the Project area include:

- The CEQA and the State CEQA Guidelines (Sections 21083.2 and 21084.1 and Appendix K);
- The CCC Guidelines for Permitting Archaeological Investigations;
- CSLC policies and procedures;
- The Native American Heritage Commission Guidelines (1989); and

- SHPO-published checklists that are broadly applicable: (1) adequacy of archaeological testing programs, (2) determinations of site significance and uniqueness, and (3) mitigation reports.

4.10.3 Impact Significance Criteria

The State CEQA guidelines (Section 15064.5) state that a project that causes a substantial adverse change in the significance of a historic resource is considered to have a significant adverse effect on the environment unless mitigated. Historical resources are buildings, structures, districts, sites, or objects that are eligible for the California Register of Historical Resources (CRHR).

The State CEQA Guidelines (Section 15064.5) define historical resources as follows:

Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource has integrity and meets the criteria for listing on the CRHR as follows:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

4.10.4 Impacts Analysis and Mitigation Measures

No cultural resources potentially eligible for the CRHR have been identified in the vicinity of the Shell Terminal. The Shell Terminal itself is older than 50 years old, however, has been modified extensively, and retains no historic integrity.

The proposed lease for continued operation of the Shell Terminal will have no effect on historically significant resources eligible for the CRHR. The Shell Terminal is not eligible and there are no other potential historical resources in the Project area.

Because there are no shipwrecks in the immediate area of the Shell Terminal, maintenance dredging and dredging of Berths #3 and #4 for future use, would also have no cultural resources impact.

4.10.5 Impacts of Alternatives

Impact CR-1: No Project Alternative

Decommissioning of the Shell Terminal would have no impact on cultural resources since none exist beneath the wharf. The transferring of operations to other area marine terminals would have no significant impacts to cultural resources for wharves already in place, but could result in significant impacts (Class II or III) if new construction or modification of existing facilities may be required.

Under the No Project Alternative, Shell's lease would not be renewed and the existing Shell Terminal would be subsequently decommissioned with its components abandoned in place, removed, or a combination thereof. The decommissioning of the Shell Terminal would follow an Abandonment and Restoration Plan as described in Section 3.3.1, No Project Alternative.

Under the No Project Alternative, alternative means of crude oil/product transportation would need to be in place prior to decommissioning of the Shell Terminal, or the operation of the Shell Refinery would cease production, at least temporarily. It is more likely, however, that under the No Project Alternative, Shell would pursue alternative means of traditional crude oil transportation, such as a pipeline transportation, or use of a different marine terminal. Accordingly, this Draft EIR describes and analyzes the potential environmental impacts of these alternatives. For the purposes of this Draft EIR, it has been assumed that the No Project Alternative would result in a decommissioning schedule that would consider implementation of one of the described transportation alternatives. Any future crude oil or product transportation alternative would be the subject of a subsequent application to the CSLC and other agencies having jurisdiction, depending on the proposed alternative.

As with the proposed Project, there is no potential to impact historical resources, since the Shell Terminal is not considered eligible, because it lacks integrity and there are no other potential resources in the area, nor are there any shipwrecks in the immediate project area. Impacts associated with deconstruction would be less than significant (Class III). Shell Terminal operations would be transferred to other Bay area terminals. For those terminals are already operational, no impacts to cultural resources would occur. For a new terminal, there may be a potential for impacts to occur. Impacts would be assessed for citing of the facility under the CEQA process.

CR-1: No mitigation is required.

Impact CR-2: Full Throughput Alternative

The transferring of operations to existing terminals would not result in cultural resources impacts (Class II). Construction of pipelines to transfer crude and product to the Shell Refinery would have the potential to impact cultural resources along the alignment and result in significant (Class II) impacts.

With no Shell Terminal, the Shell Refinery would be required to transport crude oil and product via one or more pipelines connected to other area terminals. Since these would be existing terminals, no impacts would occur to cultural resources.

Construction of the pipelines may result in significant, adverse impacts (Class II) to cultural resources along the pipeline alignment. There is a high potential that prehistoric resources would be encountered, and less potential to affect historic resources. Each selected alignment would require investigation into the extent of resources, impacts, and design of mitigation.

Mitigation Measures for CR-2:

CR-2. The following mitigation measures would be required:

- Evaluate the potential for resources and perform records searches during pipeline route selection;
- For any identified resources, evaluate their significance and conduct data recovery, as necessary; and,
- During excavation, require an archaeological monitor be present if any new, unrecorded sites are discovered.

Rationale for Mitigation: These standard measures are designed to identify, properly record, and evaluate the significance of resources and to protect resources found during excavation from damage and destruction. Avoidance of impacts to resources is also possible based on evaluation and data recovery. Measures would reduce impacts to less than significant levels.

4.10.6 Cumulative Projects Impacts Analysis

Impact CUM-CR-1: Sensitive resources exist in the Bay area and could be impacted by new construction or modification to existing facilities in areas that are previously undisturbed. The Shell Terminal would not contribute adversely (Class III) to prehistoric or historic resources.

Given the overall sensitivity of the greater Bay area to contain cultural resources, the cumulative projects identified within the area have the potential to result in significant, adverse impacts (Class II) to cultural resources. The Shell Terminal would not contribute to any disturbances of prehistoric or historic resources within the cumulative environment. Each project would require investigation into the extent of resources, impacts, and design of mitigation for that specific project.

CUM-CR-1: No mitigation is required.

Table 4.10-1 summarizes Cultural Resources impacts and mitigation measures.

Table 4.10-1
Summary of Cultural Resources Impacts and Mitigation Measures

Impacts	Mitigation Measures
CR-1: No Project Alternative	**CR-1:** No mitigation required.
CR-2: Full Throughput Alternative	**CR-2:** Identify, record, evaluate and protect resources along pipeline alignments.
CUM-CR-1: Cumulative Projects Impacts Analysis	**CUM-CR-1:** No mitigation required.

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